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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 09/874,395   | 06/04/2001     | James W. Jones       | CLX021 US           | 4480             |
| 34036 75   | 590 12/15/2004 |                      | EXAMINER            |                  |
|  | LLEY PATENT GR |                      | MERED, HABTE        |                  |
| 2350 MISSION COLLEGE BOULEVARD<br>SUITE 360<br>SANTA CLARA, CA 95054 |                |                      | ART UNIT            | PAPER NUMBER     |
|  |                |                      | 2662                |                  |

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.  | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|--|
| Office Action Summary  |   | 09/874,395   | JONES, JAMES W.  |  |  |  |
|  |   | Examiner   | Art Unit   |  |  |  |
|  |   | Habte Mered  | 2662   |  |  |  |
| Period fo  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |  |  |  |  |  |
| THE I - Exter after - If the - If NO - Failur Any r  | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be tin<br>within the statutory minimum of thirty (30) day<br>vill apply and will expire SIX (6) MONTHS from<br>cause the application to become ABANDONE | nely filed rs will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |
| Status   |   |  |  |  |  |  |
| 1)   | Responsive to communication(s) filed on   | _•   |  |  |  |  |
| 2a) <u></u> □  | This action is <b>FINAL</b> . 2b) ☐ This  | action is non-final.   |  |  |  |  |
| 3)🖂  | S) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |  |  |  |
|  | closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 45   | 53 O.G. 213.   |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)🖂  | Claim(s) 1 is/are pending in the application.   |  |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdraw   | vn from consideration.   |  |  |  |  |
| ·  | Claim(s) 1 is/are allowed.  |  |  |  |  |  |
|  | Claim(s) is/are rejected.   |  | •  |  |  |  |
| -  | Claim(s) is/are objected to.  |  |  |  |  |  |
| اــا(٥   | Claim(s) are subject to restriction and/or  | r election requirement.  |  |  |  |  |
| Applicati  | on Papers   |  | ·  |  |  |  |
| 9)⊠  | The specification is objected to by the Examine   | r  |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>04 October 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.   |   |  |  |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |   |  |  |  |  |  |
| Priority u   | ınder 35 U.S.C. § 119   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |   |  |  |  |  |  |
| _  | ☐ All b)☐ Some * c)☐ None of:   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
| Attachmen  | t(e)  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |  |  |  |  |  |
| 2) Notic   | ·= · · · · · · · · · · · · · · · · · ·  |  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:   |   |  |  |  |  |  |

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1. The formal drawings submitted on 04 October 2001 are acknowledged.

2 This application is in condition for allowance except for the following formal

matters:

The abstract of the disclosure is objected to because the length exceeds 150

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words. Correction is required. See MPEP § 608.01(b).

In the specification, page 2, line 12, the word "be" has to be added after the word

"would".

In the specification, page 2, lines 24 and 25, the phrase "to receive and store

packets" needs to be replaced with the phrase "are stored" or the sentence needs to be

rewritten to be comprehensible.

In the specification, page 8, line 7, the word "Thee" needs to be replaced by the

word "The".

In the specification, page 11, line 26, "5." needs to be removed.

Prosecution on the merits is closed in accordance with the practice under Ex

parte Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO** 

**MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claim 1 is allowed.

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4. Claim 1 is allowable over the prior art of record since the cited references taken individually or in combination fail to particularly disclose a method to regulate rate of packet grant in an asynchronous crosspoint switch using an arbiter, a counter and buffer. The counter is incremented when ever the arbiter issues a packet grant to the traffic source and decremented when ever a packet leaves the destination buffer. When the counter exceeds a predetermined threshold the arbiter will be instructed to cease issuing grants. It is noted that the closest prior art, Lyon (US Patent 6, 721 273 B1) shows a scheduler that issues a packet grant and is in effect an arbiter. Lyon shows a congestion counter in the traffic flow controller that counts the number of packet grants issued for each source but the counter is not decremented as space is made available at the destination buffer to indicate to the arbiter that it can issue more packet grants. Hence, Lyon fails to disclose or render the above underlined limitations as claimed.

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to regulating packet grants and buffer queue management:

US Patent Number 5, 327, 420 to Lyles

US Patent Number 4, 623, 996 to McMillen

US Patent Number 6, 563, 818 to Sang et al

US Patent Number 6, 205, 155 to Parrella et al

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HM

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600